LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DOTD 03-22-4198
Metric
4/98

LABORATORY MOISTURE - DENSITY RELATIONSHIP
DOTD TR 418 - Methods H & I
(Metric)

PROJECT NO. _____ DATE: _____ LAB NO: _____

*TYPE ADDITIVE: _____ TYPE SOIL: _____ SAMPLE NO.: _____

TESTED BY: _____ CHECKED BY: _____

*MAX. DRY DENSITY OF MATL. (FROM TR 418, METHOD H), kg/m³	A		
*REQUIRED % BY VOL. OF ADDITIVE (___ TR 432-B, ___ TR 416, ___ specified)	B		
*% MASS OF ADDITIVE (___ chart, ___ formula)	C		
DRY MASS OF MATERIAL (Representative portion), g	D		
*MASS OF ADDITIVE TO BE ADDED, g	E	(C x D) ÷ 100	
*TOTAL DRY MASS OF MATERIAL AND ADDITIVE, g	F	D + E	

* ***FOR USE WITH DOTD TR 418, METHOD I ONLY.***

CURVE POINT NO.	***		1	2	3	4	5	6
WATER ADDED, mL	G	See Calculations						
MASS MOLD, BASE (if appl.) & WET MATL,,g	H							
MASS MOLD & BASE (if applicable), g	I							
MASS WET COMPACTED MATERIAL, g	J	H - I						
VOLUME OF MOLD (or specimen), m³	K							
MASS OF PAN & DRY MATERIAL, g	L							
MASS OF PAN, g	M							
MASS OF DRY MATERIAL, g	DW	L - M						
MASS OF WATER, g	WW	J - DW						
WET MASS DENSITY, kg/m³	WWD	$\frac{J}{1000\ K}$						
MOISTURE CONTENT, %	MC	(WW/DW)x100						
DRY MASS DENSITY, kg/m³	DWD	$\frac{WWD}{100 + MC} \times 100$						

REMARKS: _____